

Memorandum

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

Office of Water Quality Programs

11th Floor, 629 East Main Street, Richmond, VA

SUBJECT: 2012 Citizen Water Monitoring Grant Request for Proposals

TO: Interested Citizens

FROM: C. Stuart Torbeck Jr., Water Quality Data Liaison

DATE: July 1, 2011

COPIES: Melanie Davenport, Darryl Glover

We are pleased to make available the 2012 Citizen Water Quality Monitoring Grant Program Request for Proposals (RFP). The complete RFP package (RFP and Attachments) can be downloaded from the Department of Environmental Quality (DEQ) Citizen Monitoring Program Grant web page at www.deq.virginia.gov/cmonitor/grant.html. These grants provide funding for water quality monitoring groups and individuals to monitor the quality of Virginia's waters. The maximum possible grant award this year is \$4,000.00 per proposal.

The primary purpose of these grants is to provide funds for water quality monitoring projects. The grant can be used in a variety of ways, including purchasing water quality monitoring equipment, training citizen volunteers, lab analysis costs, and promoting stream monitoring efforts in locations where DEQ is not currently collecting water quality samples.

To be eligible for funding under the regular Citizen Monitoring Grant, a grantee must follow certain guidelines, including developing a quality assurance project plan (QAPP). Any applicant who has a QAPP already approved by DEQ will not need to resubmit this component unless there have been significant changes. A grantee must also submit a copy of all data generated by their funded project to DEQ.

Collaboration between state agencies, citizen monitors, and other organizations is important in developing monitoring programs that collect data for multiple possible uses. While the grant provides funding for the development of these programs, technical assistance with developing a water quality monitoring program and/or a QAPP is also available through the Virginia Citizen Water Quality Monitoring Program. Contact information is listed below and is available on the DEQ citizen monitoring website www.deq.virginia.gov/cmonitor. Monitoring groups are strongly encouraged to utilize this resource.

If you have any questions about the Citizen Water Quality Monitoring grant or if you would like to discuss developing a water quality monitoring program, QAPP, or have any other questions, please do not hesitate to contact me at (804) 698-4461 or by email at charles.torbeck@deq.virginia.gov.

**2012 Citizen Water Quality Monitoring Grant Program
Request for Proposals
Deadline September 2, 2011**

Purpose

The purpose of the Citizen Water Quality Monitoring Grant Program is to generate scientifically accurate, citizen-collected, water quality data. The program is meant to provide guidance and support for citizen water quality monitoring and stewardship programs. Funded projects may focus on any or all of the following five categories:

- 1. List and delist impaired waters on the 303(d) Impaired Waters List**
- 2. Identify sources of pollution that may help in Total Maximum Daily Load (TMDL) development**
- 3. Track progress of TMDL or other restoration activities**
- 4. Identify waters for future monitoring by DEQ**
- 5. Educating the community on local impacts to water quality and land use activities**

Background

The Citizen Water Quality Monitoring Grant Program was established by a budget amendment in the 1999 Virginia General Assembly Session. The General Assembly based this budget amendment on the *Citizen Water Quality Monitoring Grant Report* submitted by DEQ regarding the feasibility of a grant to fund citizen monitoring activities. In 2010, the General Assembly allocated general funds for eligible activities by citizen monitoring organizations in Virginia. These funds must be expended by December 31, 2012.

General Eligibility

Funds are available to conduct water quality monitoring, assist in the development of citizen water quality monitoring programs, and citizen volunteer monitoring coordination. Any community, watershed or conservation organization, Soil & Water Conservation District, secondary school, college, or university using volunteer monitors in Virginia may apply for these funds. The maximum possible grant award is \$5,000. Only one grant may be awarded per project or grantee per grant year. Grants are awarded on a competitive basis. Because of the limited funds available, partial funding may be awarded to maximize the effectiveness of the program. No match is required to receive the grant, but funding from other sources is encouraged. Grant awardees must be able to provide DEQ with a Federal Tax Identification Number. **Grant funds will not be provided for office space, salary for staff or staff benefits, however payment for contractual services is allowed.** Funded activities can begin as soon as January 1, 2012 and must be completed by December 31, 2012.

Eligible Activities

Eligible activities include but are not limited to:

- Equipment costs such as field test kits, probes, reagents, nets, and field manuals.
- Biological and/or chemical parameter field sampling following an approved QAPP.
- Certain administrative costs such as newsletters, recruitment, educational materials, and related items.
- Any mileage reimbursement for sample collection and transport shall use IRS rate of \$0.14 per mile for service organizations. Mileage reimbursement shall not exceed 20% of the total grant request.
- Contractual services such as laboratory analysis (explained below), training water quality monitors, and quality assurance checks prior to uploading data to DEQ via the online database at www.deq.virginia.gov/easi/mdpro/public_html.
- Laboratory analysis costs. Provided that the following conditions are met:
 - 1) The analysis is conducted at a laboratory with DEQ-approved standard operating procedures and quality control/quality assurance protocols (these procedures must be submitted with the application package if they have not been submitted previously).

- 2) Sampling locations are not in areas where the data are not considered useful for water quality assessments, such as in mixing zones and near discharge pipes or during spill events. Please contact Stuart Torbeck, or your local DEQ regional office for assistance. Samples are representative of the stream (i.e. mid-channel just below the water surface) and are collected in safe locations on public property or where landowner permission has been obtained.
- 3) Data are submitted electronically to DEQ using the online database provided by DEQ.

Evaluation Criteria (Citizen Grant- max \$4,000)

A review committee will rank proposals based upon the following criteria:

- Monitoring plan identifies site locations, parameters, methodology, and is consistent with the purpose of the Citizen Water Quality Monitoring Grant Program. **(see Attachment 2) (25 points)**
- Description of local citizen involvement, identify specific watershed and if the waterbody is on 303(d) impaired waters list (must include both stream name and Virginia Department of Conservation and Recreation Hydrologic Unit code) Please contact Stuart Torbeck, if assistance is needed. **(15 points)**
- Description of coordination with DEQ, and/or other monitoring organizations to identify appropriate sites that will provide useful data. **(15 points)**
- Have filled out a data use authorization form for DEQ to identify how your group wishes the agency to use data you collect. **(see Attachment 1) (10 points)**
- Description of specific outcomes/deliverables of project. **(10 points)**
- Develop or possess a DEQ-approved quality assurance project plan (QAPP) (If a QAPP is necessary, a free template and directions are available online at www.deq.virginia.gov/cmonitor/grant.html) **(10 points)**.
- Description of how the monitoring network will be sustained beyond the grant period. **(5 points)**
- Special merit of the project such as enhancement of citizen monitoring efforts in general or providing further information on a methodology that can be transferred to other citizen monitoring organizations. **(5 points)**
- Participation in other water quality programs/initiatives such as environmental education, Adopt-A-Stream, stream bank restoration, etc. **(5 points)**
- Grant recipient who submitted the final report and/or data after the deadline or otherwise did not meet grant contractual requirements within the past five (5) years **(up to-25 points)**

Application Procedures

Original and four copies of the entire proposal package must be received no later than **4:30 p.m. on Friday, September 2, 2011**, at the following address:

Mail Delivery:
Stuart Torbeck
VA Dept. of Environmental Quality
Water Quality Monitoring
P.O. Box 1105
Richmond, VA 23218

Street Delivery:
Stuart Torbeck
VA Dept. of Environmental Quality
Water Quality Monitoring
629 East Main Street
Richmond, VA 23218

No exceptions can be made to this deadline. Notification of awards will be made by November 4, 2011. Funds to be awarded will become available when a contract has been signed and returned to DEQ. 100% of the award may be distributed when the signed contract and a written request for payment are returned. For groups who do not have a Quality Assurance Project Plan (QAPP), with the exception of education projects, one must be developed, before grant funds will be disbursed. If a QAPP is not developed and approved by DEQ, future grant applications from the organization may be disqualified.

Contractual Agreements

All work to be accomplished through the Citizen Monitoring Grant Program must be legally embodied in a contract with the grant proposal. This contract will serve as a memorandum of agreement in accordance with the adoption of the Code of Virginia §62.1-44.19:11. This contract will be between the grantee (or designee) and DEQ. Upon submission of both a signed contract agreement and a written request for payment, grant funds will be made available to the grantee. If at any time the grantee organization cannot fulfill the requirements of the contract, the remainder of the grant funds and/or any equipment purchased through the grant must be returned to the DEQ Citizen Monitoring Grant Program for redistribution.

Report Requirements

Progress reports providing updates on the project are required according to the schedule below:

Draft QAPP: February 3, 2012 (draft due to DEQ for review, if a QAPP is required)

Final QAPP: April 6, 2012 (if applicable)

Final Report: February 15, 2013 (all monitoring data must be uploaded to the online DEQ database www.deq.virginia.gov/easi/mdpro/public.html. No other submissions of raw data will be accepted.)

In an effort to conserve paper, electronic submission of the final report is encouraged. These reports can be submitted by either a CD R/RW or by e-mail to Charles.Torbeck@deq.virginia.gov. Final reports should consist of the following*:

1. Report summarizing the project and recorded observations along with a summary budget
2. If applicable - Copies of publications, list of workshops, and related material that utilized grant funds

*If necessary, a hardcopy of these items can be sent to the address at the bottom of this page.

All water quality data collected using grant funds must be entered on the DEQ online database at www.deq.virginia.gov/easi/mdpro/public.html. Instructions on how to upload this data will be provided when grant awards are announced in the fall of 2011. The database will allow grant recipients to upload water quality data collected during the course of the project. The public can view this data by accessing the website.

If the organization does not continue monitoring beyond the grant period, any equipment, such as meters or unopened reagents, purchased with Citizen Monitoring Grant Program funds must be returned to DEQ at the address listed below to be redistributed or used for future training sessions.

Please direct any questions to:

Stuart Torbeck
Water Quality Data Liaison
Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218
804-698-4461 (phone)
804-698-4032 (fax)
Charles.Torbeck@deq.virginia.gov (E-mail)

**Virginia Department of Environmental Quality
2012 Citizen Water Quality Monitoring Grant Program Application**

The entire proposal package (not to exceed 10 pages, excluding laboratory procedures) must be received by **4:30 p.m. on September 2, 2011**, to be considered for the Citizen Water Quality Monitoring Grant Program. Five copies of the proposal package (one original and four photocopies) are required.

1) The Organization and Contact Information:

Name of applicant organization (must be able to provide a Federal ID Number)

Brief description of your organization:

Project contact person:

Contact person phone number:

Contact person email:

Mailing address for grant correspondence:

2) The Project:

Brief description of monitoring activities/project:

Dates for which funding is requested (must not extend beyond January 1, 2012 – December 31, 2012)
_____ to _____

3) The Budget: Amount requested (not to exceed \$4,000): _____ Total budget _____

4) Application Package: All information outlined on the back of this form must be included in the proposal package.

5) The Signature:

Approval of Organization's Chief Officer

Print Name

Title

Date

**2012 Citizen Water Quality Monitoring Grant Program
Proposal Package Requirements**

The complete proposal package should not exceed ten pages (excluding laboratory procedures).

Please be sure that all of the following information is included in this proposal package:

- ☐ Citizen Water Quality Monitoring Grant Program Application includes:
 - ☐ Cover Page
 - ☐ Application Form (2 pages)
- ☐ Data Use Authorization Form: Fill out and return Attachment 1 to identify how your organization wishes to have DEQ use your monitoring data
- ☐ Monitoring Plan: Use Attachment 2 to provide a complete preliminary Quality Assurance Monitoring Plan (QAMP)
- ☐ Federal Tax Identification Number: If a grant is awarded to your organization, you must be able to provide a Federal Tax Identification Number. This number can be provided on this application or upon notification of an award. _____
- ☐ Copies: Five complete proposal packages (one original and four copies) must be received by **4:30 p.m. on September 2, 2011**, at the following address:

Mail Delivery

Stuart Torbeck
Water Quality Data Liaison
Virginia Dept. of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

Street Address

Stuart Torbeck
Water Quality Data Liaison
VA Dept. of Environmental Quality
629 East Main Street
Richmond, Virginia 23218

Please direct any questions to: Stuart Torbeck at 804-698- 4461 or Charles.Torbeck@deq.virginia.gov

2012 Citizen Water Quality Monitoring Grant Program Application
Additional pages may be attached as needed.

1. Please describe the specific goals of this project: **5 points**
2. Please describe specific expected outcomes/deliverables of this project: **5 points**
3. Please identify watershed(s) in which project is located (please specify DCR watershed code along with the stream name. Contact Stuart Torbeck if assistance is needed.): **5 points**
4. Please identify whether this project is located on any impaired stream segments (by name) identified on the 303(d) Impaired Waters List: **5 points**
5. Describe local citizen involvement with the project (are volunteers performing the work?): **5 points**
6. Please describe any other citizen monitoring or volunteer organization activities located within the same watershed(s) where this project will occur: **5 points**
7. Is a new project or continuation of an existing project: **Required for consideration**
8. Please describe items to be funded with this grant: **Required for consideration**

9. Line item budget for this project (attach additional sheets if necessary): Required for consideration

Equipment Costs (please specify):	\$
Laboratory Costs (please specify):	\$
Contractual Services (please specify):	\$
Administrative Costs (please specify):	\$
Other (please specify):	\$
Total:	\$

10. Please describe any coordination with DEQ, DCR, and other monitoring organizations to identify appropriate sites: 5 points**11. Please describe any partnerships or cooperation with other organizations or agencies that this project will develop or enhance: 5 points****12. Please describe other water quality programs/initiatives that the organization participates in (such as environmental education, Adopt A Stream, stream bank restoration): 5points****13. Please describe how the monitoring network will be sustained beyond the grant period: 5 points****14. Will a quality assurance project plan (QAPP) will be developed or enhanced during the project period (or whether the project will operate under an existing DEQ-approved plan): 10 points****15. Please include any other information you feel is necessary for the review of this grant proposal (including any experience in water quality sampling and/or data collection): 5 points****16. Complete Data Use Form (Attachment 1) and Monitoring Plan (Attachment 2): 35 points total**

Levels of Citizen Water Quality Data in Virginia

In Virginia, the Department of Environmental Quality (DEQ) has developed three levels of data quality for citizen and other non-DEQ water quality monitoring data based upon both the level of data quality and the authorized uses of the data provided to the agency. In addition to agency needs, citizen-collected data may also be used to educate the community, to assist local governments in land use planning, to supplement data for university and professional studies, and to assist local soil and water conservation districts in prioritizing watershed work for best management practices.

<u>Level</u>	<u>Appropriate Data Uses</u>	<u>QA/QC Protocols</u>
III	<ul style="list-style-type: none"> List or delist waters on the 303(d) Impaired waters list Assesses waters for 305(b) Report Use with DEQ data for TMDL development All uses listed in Levels I and II 	<ul style="list-style-type: none"> DEQ-approved Quality Assurance Project Plan (QAPP) and field or lab Standard Operating Procedures (SOP) Field and/or laboratory audit required. Group provides calibration and quality control associated information to DEQ when submitting data. This information must meet the specific criteria stated in the QAPP.
II	<ul style="list-style-type: none"> Identify waters for DEQ follow up monitoring Track performance of TMDL implementation All uses listed in Level I 	<ul style="list-style-type: none"> DEQ-approved Quality Assurance Project Plan and approved field or lab SOPs At this level, there may be deviation from an approved method if it can be demonstrated that the method collects data of similar quality to an approved method.
I	<ul style="list-style-type: none"> Education Baseline Notification of Possible Pollution Events Local Land Use Decisions Special Studies 	<ul style="list-style-type: none"> No Quality Assurance Project Plan (QAPP) or SOP required by DEQ. Uniform methodology recommended. QAPP, SOPs and/or lab methods do not meet DEQ quality assurance/quality control requirements. There is no Virginia Water Quality Standard for parameter the method measures.



Use Authorization Form for Water Quality Data

Name of Group or Organization:				Date:	
Name of Submitter:				Role or Title (QA officer, leader, etc.)	
Type(s) of Monitoring Conducted by Organization?		<input type="checkbox"/> Chemical (pH, dissolved oxygen nutrients, etc.)	<input type="checkbox"/> Physical (Temperature, stream flow, etc.)	<input type="checkbox"/> Biological (Macroinvertebrate, E. coli, etc.)	
Type of Organization	<input type="checkbox"/> Citizen Volunteer	<input type="checkbox"/> Federal Agency	<input type="checkbox"/> State Agency	<input type="checkbox"/> Local Agency	
	<input type="checkbox"/> Business or Industry	<input type="checkbox"/> College or University	<input type="checkbox"/> Other (Name):		

On behalf of the group identified above, we agree that the Virginia Department of Environmental Quality (DEQ) may use water quality monitoring data we generate per our selection(s) below. Our choice(s) will remain in effect unless or until our organization submits changes in the future.

Options for Uses of Your Data (may select more than one):

Information about each of the three levels of citizen data is available on the previous page

- ☐ **1. List and delist impaired waters on the 303(d) Impaired Waters List**
Data recognized by DEQ as Level III can be used to list or delist water on the 303(d) impaired waters list. We understand that 303(d) listed waters do not meet minimum water quality standards in Virginia and a Total Maximum Daily Load (TMDL) may eventually be developed to improve water quality.
- ☐ **2. Source identification for TMDL development for waters already listed as impaired**
Level III data can be used in conjunction with DEQ monitored data to identify sources of pollution for 303(d) listed waters for TMDL development. We understand that our data will not be used by itself, without water quality data collected by DEQ, wherever possible.
- ☐ **3. Track progress of a TMDL Implementation Plan and other restoration**
Level II or III data can be used to track the progress of restoration in a TMDL waterbody including installed Best Management Practices or to identify areas where other restoration efforts are taking place.
- ☐ **4. Identify waters for future DEQ monitoring**
Level II or III data can be used to identify a waterbody for follow-up monitoring by DEQ. We understand that DEQ may not be able to monitor at these locations and/or assess water quality for some period of time.
- ☐ **5. Educate land owners on the water quality impacts of land use activities**
All levels of data can be used to help in educating the community about water quality and land use activities.

Signature (if submitting by mail or fax): _____

Mail: VA DEQ Stuart Torbeck (11 th floor) P. O. Box 1105 Richmond, VA. 23218	Fax: Stuart Torbeck VA DEQ (804) 698-4032	E-mail: Charles.Torbeck@deq.virginia.gov
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2012 Citizen Water Quality Monitoring Grant Program Application Monitoring Plan

Organization name:	
Date:	
Watershed(s) monitored:	

Specific Goals of Monitoring Program

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Identify data users/uses of the data/mechanism of reporting data. Remember monitoring data must be reported to DEQ using the online database (www.deq.virginia.gov/easi/mdpro/public_html)

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Monitoring Sites (Use additional sheets if necessary): Contact Stuart Torbeck if assistance is needed

Site #*	Purpose	Sample Site Description (Ex. 100 meters upstream of Route 453 Bridge)	Sampling Frequency (ex. once per month, etc)	Latitude	Longitude

* If not known, estimate the number of sites, the purpose for these sites (there can be more than one purpose), and possible sample locations

Chemical Parameter	Methodology (i.e. LaMotte model #, HACH model #, EPA Method #, etc.)
Dissolved Oxygen	
pH	
Ammonia-Nitrogen	
Nitrate-Nitrogen	
Total Nitrogen	
Total Phosphorus	
Ortho Phosphorus	
Alkalinity	
Turbidity	
Conductivity	
Other (specify)	
Other (specify)	

Physical Parameter	Methodology (i.e. thermometer, stream transect, etc.)
Temperature	
Stream Flow	
Other (specify)	

Biological Parameter	Methodology (i.e. VA SOS Modified Method, Coliscan Easygel, etc.)
Macroinvertebrate	
E. coli Bacteria	
Other (Specify)	

If grant funds are requested for laboratory analysis, have these laboratory SOPs and Quality Assurance/Quality Control procedures been submitted to DEQ (either previously or with this proposal package)?

If a laboratory is being used to analyze samples, what is the name and location of the laboratory?